



①9 BUNDESREPUBLIK
DEUTSCHLAND



DEUTSCHES
PATENTAMT

⑫ Offenlegungsschrift
⑩ DE 40 41 130 A 1

⑤1 Int. Cl.³:
H 01 S 3/02
H 01 S 3/094
H 01 S 3/082
H 01 S 3/10

②1 Aktenzeichen: P 40 41 130.3
②2 Anmeldetag: 21. 12. 90
④3 Offenlegungstag: 2. 7. 92

DE 40 41 130 A 1

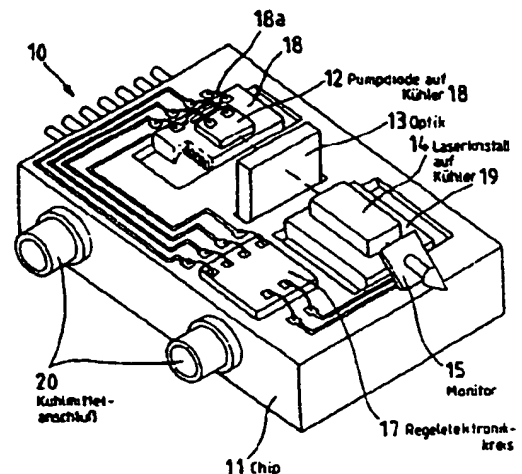
⑦1 Anmelder:
Messerschmitt-Bölkow-Blohm GmbH, 8012
Ottobrunn, DE

⑦2 Erfinder:
Kroy, Walter, Dipl.-Phys. Dr., 8012 Ottobrunn, DE;
Mehnert, Axel, Dipl.-Ing., 8920 Schongau, DE;
Peuser, Peter, Dr., 8012 Riemering, DE; Schmitt,
Nikolaus, Dipl.-Phys., 8000 München, DE

Prüfungsantrag gem. § 44 PatG ist gestellt

⑥4 Festkörper-Lasersystem

⑤7 Die Erfindung bezieht sich auf einen mikrosystemgestützten, hybride aufgebauten und wesentlich miniaturisierten, diodengepumpten Festkörperlaser zur Erzeugung von Einfrequenz-Laserstrahlung sowie sichtbarer und gepulster Laserstrahlung. Ausführungsbeispiele sind beschrieben und in den Figuren der Zeichnung skizziert.



DE 40 41 130 A 1

Translated from the Original German, to English

Any alterations to this translation, including handwriting or crossed out text, renders this translation void.

(54) Solid state laser system

(57) The invention relates to a microsystem-supported, hybrid-assembled, and considerably miniaturized diode-pumped solid state laser to produce single-frequency laser beams as well as visible and pulsed laser beams. Embodiment examples are described and outlined in the figures of the drawing.

11 chip

12 pump diode on cooler

13 optics

14 laser crystal on cooler

15 monitor

17 control electronics circuit

20 coolant connection

Date: August 19, 2005
Bothell, Washington USA
FIS Translation #: 200230432

CERTIFICATION OF TRANSLATION ACCURACY

This document certifies that the following list of documents have, to the best of our knowledge and belief, been translated from German into English by Erik Macki, a Foundation for International Services certified translator of German and an accredited member of the American Translation Association.

List of documents:

Patent Abstract (Solid state laser system)



Heidi Otis, Project Manager
Foundation for International Services Inc.

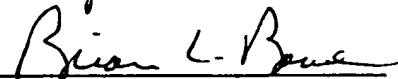
NOTARIZATION

State of Washington
County of Snohomish

I certify that I know or have evidence that

Heidi Otis is the person who appeared before me and said person acknowledged that she signed this document and acknowledged it to be her free and voluntary act for the uses and purposes mentioned in the document.

Dated: August 19, 2005



(signature of Notarizing Officer)

Title: Notary Public

